



CONSUMER NEWS

Planet-Safe Picnics

Going "Zero Waste" With Biodegradable Greenware

BY SHEILA PELL

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A zero-waste picnic is possible, with help from biodegradable tableware by Cereplast (above).

With biodegradable plates, cups and cutlery, picnickers can enjoy eating outdoors without leaving a lasting reminder in the local landfill.

Plastics made from renewable resources like corn and potato starch (biopolymers), and tableware and cutlery derived from corn, potatoes and sugarcane waste (bagasse), offer new possibilities for serving summer salads.

Performance-wise, the bioplastics have a few durability issues. The same factors that lead to food spoilage, like humidity, also influence the rate of degradation of a biodegradable fork.

Some may "lack the tenacity of the plastic items we're used to," says David Walton of Gaiam.com, a reseller that offers bioplastic picnicware. For water containers, Gaiam recommends stainless steel instead.

At TheGreenOffice.com you'll find bagasse plates and bowls alongside spudware cutlery that's both reusable and biodegradable; it's advertised as sturdy enough for boiling or microwaving and dishwasher safe, with a shelf life of five years. The site also sells corn-based cutlery that may be great for potato salad but won't work for hot foods.

Worldcentric.org, a nonprofit with a fair trade/eco online store, touts the strength of bagasse but admits that its tableware, while freezer safe and able to handle hot food and drinks up to 190 degrees Fahrenheit, "sweats" with hotter foods. Perspiration aside, the plates are "soak proof," have no plastic lining, and can be used for hot and cold items. They effectively replace Styrofoam, paper plates, and petro-plastics. World Centric also sells compostable waste bags and durable utensils made from

corn starch (80 percent of which is not genetically modified) that are designed to handle very hot foods. Even the cutlery's package is compostable.

Cost-wise, greenware is often pricier than other plastics. World Centric sources sugarcane from China to offer "the best pricing," but manufacturers say cutlery typically costs 20 to 30 percent more than conventional-ware. With other clear plastics, "prices are competitive," says Brooke Pfeuffer of the Colorado company, Eco-Products, which carries compostable and conventional wares. Its picnic-perfect ("premium-strength") bagasse plates are cheaper than some paper alternatives. The company also sells recycled napkins and paper plates that are biodegradable and compostable.

When it comes to biodegradability claims, Steve Mojo, executive director of the Biodegradable Products Institute (BPI), recommends checking its certification standards, which he says "have well-defined pass/fail criteria for biodegradation, disintegration and safety."

Among the many shades of green, there are also recycled wares. Recycline.com provides 100 percent recycled, reusable, dishwasher-safe (low heat cycle) plates, cutlery and tumblers. The light, thin-walled material comes from Stonyfield yogurt containers. Recycline sells Preserve Cutlery in reusable 24-pack canisters in three different colors. The Preserve Plateware, "durable and high-rimmed," comes in seven- or 10-inch sizes.

The Zero Waste Picnic?

"You can have a zero-waste picnic," says Eco-Product's Pfeuffer. "You don't have to throw anything away." It's an amazing possibility, but unfortunately, a limited reality. Consumers can only compost the cutlery if they happen to live near one of the country's few commercial composting facilities, clustered in a handful of states. While some com-

postables can go into a home compost pile, most cannot. With consumers left holding the bag, the dump beckons. And even bioplastics don't readily disintegrate in landfills.

Martha Leflar of the Charlottesville, Virginia-based Sustainable Packaging Coalition, an offshoot of architect William McDonough's visionary non-profit GreenBlue, cites poor planning.

"There's no infrastructure yet for collection," she says. The biopolymer industry "is designing something for a system that doesn't exist."

"That's a huge issue," admits Michael Muchin, vice president and sales director for Cereplast, a manufacturer of bioplastic resins found in GenPak and The Harvest Collection products. To address the problem, BPI and *Biocycle* magazine recently launched a public website, Findacomposter.com, "so we can better answer this question over time," says BPI's Mojo.

For now, labels reflect the confusion. Muchin says there's not even a symbol yet for "compostable." Such packaging is lumped into the #7, or "other" designation. While many bioplastics could be recycled, reclaimers now fear they'll "contaminate" the petro-plastic waste stream, making these products unrecyclable. Bioplastics are a potential "nuisance," says the Association of Post-consumer Plastic Recyclers, largely because there's not enough floating around to make recycling it profitable. Disposal aside, environmentalists raise concerns about the use of nanotechnology and genetically modified organisms (GMOs), pesticides used on donor crops and chemicals added in processing.

"Bioplastics hold great promise for moving us away from dependence on plastics made from oil and gas," says Tom Lent, technical policy coordinator for the Healthy Building Network. "But while we're growing the feedstock unsustainably, bioplastics are still depleting oil and soil and adding lots of toxics to boot. Just as we're trying to do with food, we've got to change the way we grow the plants we want to turn into plastics to healthy, sustainable means."

Where GMOs are concerned, Cereplast's Muchin points to another side: "some think it's fantastic to get GMO in because it's not a food application." Going GMO-free, he says, would raise consumer prices.

While passionate about the potential of bioplastics, Leflar's greatest concern is that the lack of recovery systems is sending many to landfills. Lent agrees. "Paper and hot dogs don't break down very well in the static anaerobic environment of the landfill. Bioplastics can't provide miracles there."

But Leflar says when it comes to bioplastics and food, the big issue isn't slow breakdown. In compost, plant-based plastics are essentially carbon-neutral as they decompose.

But in a landfill, wet organics aren't nearly so benign.

So are bioplastics really a big improvement over petro-plastics for this summer's round of *al fresco* dining? Do you vote with your packaging dollars for new infrastructure—or deck your picnic table with traditional plastics, for which there's a recycling center nearby?

Leflar offers some guidance: Consider what you'll do with the item after its use, she says. "If you plan to compost the food waste and plasticware after the picnic, then biopolymers are the correct choice." If you intend to recycle the plasticware, "then purchasing a product with recycling infrastructure available is the correct choice." But in our world of imperfect waste management options, should you plan to toss the whole mess in the trash, you could be contributing to five years of methane production from the landfill. Of course, as Leflar notes, petroleum-based plastics "take hundreds of years to break down." That's the promise and peril of plastics. It's no picnic, but then there's no picnic without it, either.

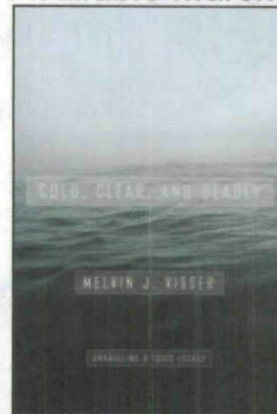
CONTACTS: Biodegradable Products Institute, (888)BPI-LOGO, www.bpiworld.org; Find a Composter, www.findacomposter.com.

SHEILA PELL is a reporter who lives in Charlottesville, Virginia.

The plastics in biodegradable tableware are made from renewable resources like corn and potato starch

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